Large equipment is often necessary to remove nonnative invasive species.

Award Amount
$222,200

Watershed
Cache Creek Watershed

County
Yolo County

CALFED Region
Sacramento Valley Region

Legislative Districts
US Congress: 1
State Assembly: 8
State Senate: 5

Purpose

The purpose of this project is to remove and control nonnative species Tamarix and Arundo donax, encourage revegetation with native riparian species, and conduct long-term monitoring along a 14-mile stretch of the lower Cache Creek Watershed.

Project Goals

- Remove nonnative invasive species (Tamarix and Arundo donax) in the lower Cache Creek Watershed.
- Conduct post-removal management.
- Conduct monitoring along 13 sites in the lower Cache Creek Watershed.
- Conduct community outreach.

Benefits to the CALFED Program

Cache Creek flows into the Sacramento River floodplains of the Yolo Bypass and has been identified as a target of the Ecosystem Restoration Program. Control of the invasive species Arundo donax and Tamarix is of particular concern because they displace native flora, offer marginal value to fish and wildlife, and cause channel instability. Heavy infestation of these species can increase sediment deposition, which in turn substantially reduces channel capacity, increasing the potential for levee overtopping and subsequent failure. These species also offer little shading over the creek, causing higher water temperatures and altered water chemistry. Controlling Arundo donax and Tamarix in the lower Cache Creek Watershed will greatly benefit the local watershed and contribute to the goals of the CALFED Program.

Project Overview

Nonnative species, specifically Arundo donax and Tamarix, have been a part of the Cache Creek Watershed for decades. Originally introduced as ornamentals and recommended for erosion control, these invasive species have quickly worked their way into much of the watershed and have become a dominant species on creek banks and in adjacent riparian areas. These nonnative species are crowding out the remaining native vegetation, building midstream islands, disrupting the flow regime, and increasing flooding on adjacent lands. Tamarix and Arundo donax are efficient sediment traps that over time can build islands to a height of 10 feet.

This project removes approximately 300 acres of Tamarix and Arundo donax within riparian areas between the Capay region and the Interstate 5 bridge. The invasive species are removed mechanically with specially designed equipment and the biomass left in place. At sites where mechanical removal is not feasible, manual methods are used. One herbicide spray application will be applied within 30 days of mechanical treatment.

An essential component for success in nonnative invasive species control projects is post-removal management. The target weeds routinely shed hundreds of thousands of seeds per plant. Removal of invasive species will be followed by a resprout spray program. Follow-up spraying will continue at the sites as needed for the life of the grant. In addition, an ongoing endeavor to implement an integrated pest management program will be coordinated with the invasive species removal. The project will also be complemented by a monitoring program at 13 sites along the lower Cache Creek Watershed and a community outreach program.

Dedicated workers attempt to remove nonnative invasive species by hand.

Contact Information

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